

Amendment to Claims

This listing of Claims will replace all prior versions and listings of claims in this Application.

Listing of Claims

Claim 1 (PREVIOUSLY PRESENTED): A computer-based image-manipulation method for enabling anti-clipping, selective user control over a color-affecting parameter in a computer-presented color image which is intended to be printed, where clipping is defined by the occurrence of an unintended condition, based upon user control input, wherein that parameter assumes a value which lies outside a desired value range which is directly associated with the computer-recognized number value range of 0-255, said method comprising

furnishing suitable computer-responsive, change-value color controls that are selectively manipulable by a user to effect changes, ultimately, in such a parameter value, thus to vary a certain characteristic of color in the image, and

applying predetermined governance over the actual value of the color-affecting parameter, including (a) implementing preliminary matrix processing of a user-chosen Chroma value, followed by (b) implementing, for each respective color-space color, an anti-clipping algorithm in accordance with the algorithmic formula expressed as follows:

$$OUTPUT = \frac{255}{4} \left(\left[1 + \frac{TANH\left(\frac{[INPUT + \Delta L - 128 - G + \Delta R]}{G}\right)}{G} \right] + \left[1 + \frac{TANH\left(\frac{[INPUT + \Delta L - 128 + G + \Delta R]}{G}\right)}{G} \right] \right)$$

whereby, no matter the input control implemented by the user, that user chosen value is constrained in relation to approaching either one of the two limit values in the mentioned range to an asymptotic-like approach toward such limit value.

Claim 2 (PREVIOUSLY PRESENTED): The method of claim 1, wherein the application of governance involves inserting a selected, matrix-processed Chroma value is directly into the mentioned anti-clipping algorithm.

Claim 3 (CANCELLED WITHOUT PREJUDICE).

Claim 4 (PREVIOUSLY PRESENTED): The method of claim 1, wherein said furnishing of controls includes providing individual controllers each relating to at least one of the collection of color parameters drawn from the list including (a) Red, Green and Blue color offset, (b) Lightness offset, (c) Chroma, and (d) Gamma.

Claim 5 (CURRENTLY AMENDED): The method of claim 1, wherein the algorithmic formula expressed as follows:

$$OUTPUT = \frac{255}{4} \left(\left[\frac{1 + \tanh\left(\frac{[INPUT + \Delta L - 128 - G + \Delta R]}{G}\right)}{2} \right] + \left[\frac{1 + \tanh\left(\frac{[INPUT + \Delta L - 128 + G + \Delta R]}{G}\right)}{2} \right] \right)$$

is modified as expressed by the modified algorithmic formula presented as follows:

$$\left(\frac{255}{4} \right) \left(\left[\frac{1 + \tanh\left(\frac{[(INPUT - 128) + B(INPUT - 128)^3 + \Delta L - G + \Delta R]}{G}\right)}{2} \right] + \left[\frac{1 + \tanh\left(\frac{[(INPUT - 128) + B(INPUT - 128)^3 + \Delta L + G + \Delta R]}{G}\right)}{2} \right] \right)$$

$$\left(\frac{255}{4} \right) \left(\left[1 + \text{TANH} \left(\left[(\text{INPUT} - 128) + B(\text{INPUT} - 128)^3 + \Delta L - G + \Delta R \right] / G \right) \right] + \right. \\ \left. \left[1 + \text{TANH} \left(\left[(\text{INPUT} - 128) + B(\text{INPUT} - 128)^3 + \Delta L + G + \Delta R \right] / G \right) \right] \right)$$

Claim 6 (PREVIOUSLY PRESENTED): The method of claim 5, wherein said applying of governance involves inserting a selected, matrix-processed Chroma value directly into the mentioned modified algorithmic formula.

Claim 7 (PREVIOUSLY PRESENTED): The method of claim 5, wherein said furnishing of controls includes providing individual controllers each relating to at least one of the collection of color parameters drawn from the list including (a) Red, Green and Blue color offset, (b) Lightness offset, (c) Chroma, and (d) Gamma.